

A Synopsis of the Genus *Talanus* Jacquelin du Val in America
North of Mexico, with descriptions of two new species.

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The genus *Talanus* is restricted to the Western Hemisphere and contains some thirty named species (Blackwelder, 1945, p. 543). Practically all of these are tropical, ranging from Mexico to Brazil, with a few known from islands of the West Indies. LeConte (1878, p. 421) described two species from Florida and, until now, these have been the only known North American representatives of the genus. The following two new species were discovered during the course of this investigation.

Talanus mecoscelis NEW SPECIES

(Figure 1)

Description—Holotype, male. Elongate, slender, black, shining. Head strongly constricted behind eyes with a pronounced transverse depression across vertex, a shallow frontal depression delimiting clypeus; surface coarsely and densely punctured on frons and vertex, more finely so on clypeus; eyes large, convex, weakly emarginate in front; antennae moderate in length, basal six segments slender, third the longest, seventh slightly wider, 8 to 10 still wider and subequal in size, eleventh larger, elongate-oval; terminal segment of maxillary palpus large, scalene. Pronotum one-eighth longer than broad, strongly and evenly convex from side to side, a strong marginal bead set off by a deep groove around entire perimeter, lateral marginal bead narrowly but strongly reflexed, sides strongly rounded in dorsal view, broadly sinuate in basal one-fourth; apex strongly rounded, angles obtuse and broadly rounded; base arcuate, angles acute and prominent; surface coarsely and densely punctured with a feeble median depression near base; ventral surface of pronotum coarsely and densely punctured, prosternum minutely rugulose, prosternal process strongly convex between coxae, the apex abruptly deflexed behind. Elytra coarsely punctate-striate, punctures in deep sulci, intervals strongly convex, impunctate; epipleural fold inflexed to beginning of terminal abdominal sternum, not attaining apex of elytra. Ventral surface of mesothorax, metathorax and abdomen finely and sparsely punctured; terminal two abdominal sterna expanded laterally, concealing large portion of epipleural fold. Legs very long, metafemora extending caudad beyond fourth (last) ventral abdominal suture, pro- and mesotibiae with conspicuous tooth on mesal margin of distal half, nearly

hidden by dense patches of fine yellow setae; metatibiae with two very small, widely-spaced denticles on mesal margin nearly hidden by yellow hairs; tarsi extremely long, four-fifths as long as tibia on meso- and metathoracic legs; three-fourths as long as tibia on prothoracic legs; all tarsal segments except apical and penultimate with dense pads of long yellowish hairs; apical segments more cylindrical and as long as or longer than their respective basal segments combined, with only a few widely scattered hairs beneath; penultimate segments of each tarsus small, cylindrical.

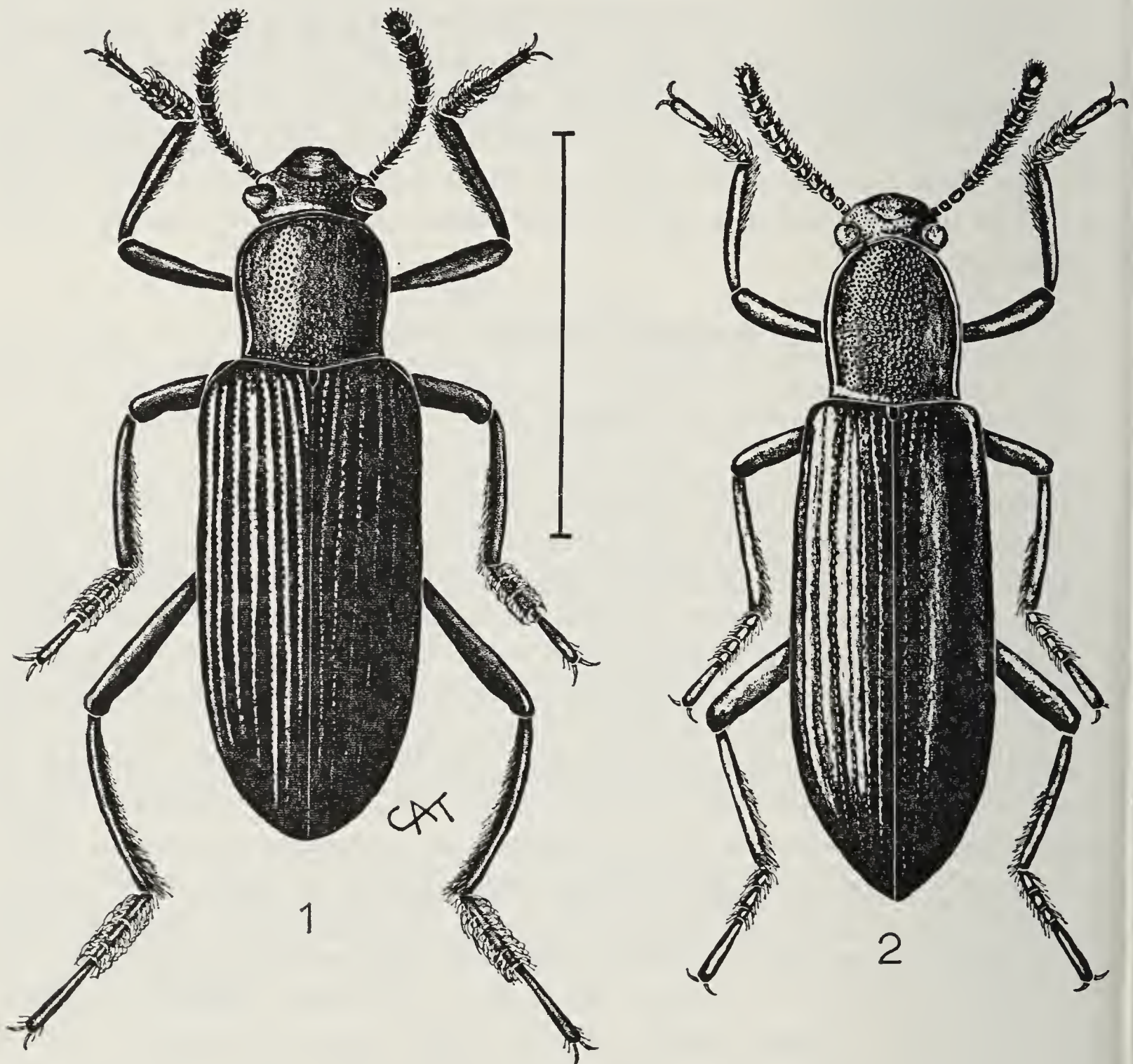


FIGURE 1. *Talanus mecoscelis*, Female (Allotype).

FIGURE 2. *Talanus spilmani*, Male (Paratype). Line=5 mm.

Length: 8.0 mm; width: 2.8 mm.

Allotype, female. Similar to male but lacking the denticles on the mesal margin of pro- and mesotibiae; metatibiae with two denticles as in male. Length: 9.2 mm; width: 3.2 mm.

Type Locality: Holotype, allotype, and 3 paratypes labelled Brownsville, Texas, August 8, 1937, D. J. & J. N. Knull. Additional paratypes: (1) Brownsville, Texas, May 25, 1939, D. J. & J. N. Knull; (1) Brownsville, Texas, May 25, 1934, J. N. Knull. The entire type series is placed in the Ohio State University Insect Collection.

Measurements (Paratypes): Length: 7.4-8.4 mm.; width: 2.5-3.2 mm.

Discussion: *Talanus mecoscelis* can be associated most closely with *T. subexaratus* Mäklin, a species widely distributed in South and Central America. Through the courtesy of Mr. J. Balfour-Browne of the British Museum (Natural History), I was able to study ten specimens, presumably including most of the variations of *T. subexaratus* encountered by Champion. *Talanus subexaratus* is quite different from *T. mecoscelis*. It is smaller (5-7.5 mm., Champion, 1887, p. 326), brownish instead of black, the legs are shorter (the metafemur does not attain the fourth (last) ventral abdominal suture), the tarsi are not as hairy and the distal ends of the tibiae are much more sparsely setose so that the teeth or denticles, when present, are clearly visible.

Champion regarded *T. subexaratus* as a highly variable species but nothing indicates that *mecoscelis* is a mere variant of that species.

***Talanus spilmani* NEW SPECIES**

(Figure 2)

Description—Holotype, male. Elongate, subparallel, slender, dark brown, shining, legs piceous. Head strongly constricted behind eyes, no transverse depression across vertex, a shallow frontal depression delimiting clypeus; surface moderately coarsely and densely punctured, more finely so on clypeus; eyes large, convex, weakly emarginate in front; antennae moderately stout, basal five segments subequal in thickness, third longest, sixth slightly wider, seventh still wider, 8 to 10 slightly wider and subequal in size, eleventh larger, elongate-oval; terminal segment of maxillary palpus large, scalene. Pronotum one-seventh longer than broad, strongly and evenly convex from side to side, lateral marginal bead set off by deep grooves, grooves ending at basal angles but continuing around apical angles and becoming obsolete almost in line with clypeus; lateral margins narrowly but strongly reflexed; sides strongly rounded in dorsal view, broadly and feebly sinuate in basal one-third; apex strongly rounded, angles obtuse and broadly rounded; base feebly bisinuate with middle portion somewhat reflexed, angles nearly rectilinear, not prominent; surface coarsely and densely punctured, a distinct transverse impression near base; ventral surface of pronotum coarsely and densely punctured, prosternum minutely rugulose; prosternal process strongly convex between coxae, apex abruptly deflexed behind.

Elytra moderately coarsely punctate-striate, punctures not in sulci except along suture, and toward apex, individual punctures subequal to width of intervals which are flat and impunctate; epipleural fold inflexed to beginning of terminal abdominal sternum, not attaining apex of elytra. Mesosternum and metasternum

coarsely punctured laterally, punctures much finer and more widely spaced on median areas and on abdominal sterna; terminal two abdominal sterna expanded laterally, concealing large portion of epipleural fold. Legs long, metafemora extending caudad approximately to suture separating third and fourth abdominal sterna; all tibiae with a small tooth on mesal margin of distal half, nearly concealed by dense patches of fine yellow setae; tarsi extremely long, five-sixths as long as tibiae on meso- and metathoracic legs, two-thirds as long as tibiae on prothoracic legs. All tarsal segments except apical and penultimate with dense pads of long yellowish setae, penultimate segment of each tarsus with a few long yellowish setae; apical segments more cylindrical and as long as or longer than their respective basal segments combined, with only a few scattered setae beneath; penultimate segment of each tarsus small, cylindrical.

Length: 7.0 mm; width: 2.2 mm.

Allotype, female. Similar to male but lacking the teeth on distal half of tibiae. Length: 7.3 mm; width: 2.1 mm.

Type locality: Holotype, allotype, and one paratype (F) labelled: Biscayne, Florida, May 28, Hubbard and Schwarz (USNM). Additional paratypes: (2M, 3F) Lake Okeechobee, Florida, March 7, 1913, W. S. Blatchley (PU, W. S. Blatchley Collection); (1F) Moore Haven, Florida, March 3, 1918, W. S. Blatchley (PU, W. S. Blatchley Collection); (1M) Cape Sable, Florida, February 22, 1919, W. S. Blatchley (PU, W. S. Blatchley Collection); (1F) Lake Worth, Florida (MCZ, Bowditch Collection); (1M) Lake Okeechobee, Florida, March 2, 1913 (MCZ, N. S. Easton Collection) (3M, 3F) Lake Worth, Florida (CMP, H. W. Klages and John Hamilton Collections). Two of the latter were collected April 14. One specimen from Chokoloskee, Florida, October 20, 1923, W. S. Blatchley (PU, W. S. Blatchley Collection) is not included in the type series because it is somewhat aberrant.

Measurements (Paratypes): 5.6-8.0 mm; width: 1.7-2.4 mm.

Discussion: *Talanus spilmani* has the appearance of a large *T. langurinus* and has frequently been mistakenly identified as that species in the past. Size alone will separate all but one of the specimens I have seen but the relative length of the legs and stouter pronotum in *spilmani* will also distinguish it from *langurinus*. In *spilmani* the width of the pronotum is usually about 90 per cent of the length whereas in *langurinus* this same character averages about 80 per cent.

On several occasions the two species have been collected together, and in the Hamilton collection (CMP) a specimen of each species from Lake Worth, Florida was glued to the same card. It is interesting that no recently collected specimens have shown up in collections; all nineteen known specimens are quite old. This species is named in honor of Mr. T. J. Spilman to whom I am indebted for many favors.

The history of the two previously recognized North American species of *Talanus* is worthy of mention. In 1878 (p. 421) LeConte described the genus *Dignamptus* and the two included species *stenochinus* and *langurinus*, both from Enterprise, Florida. *Dignamptus* was subsequently reduced to a synonym of

Talanus (Jacquelin du Val)¹ by Champion (1887, p. 321). Hamilton (1895, p. 321) quoted Horn (reference not found; possibly a personal communication) to the effect that *langurinus* and *stenochinus* were merely extremes of one species.

Blatchley (1914, p. 143) was apparently misled by this previous lumping of the two species. He realized that there were at least two species of *Talanus* in Florida and described *okeechobensis* as a new species. Fall (1932, p. 148) corrected the situation with the statement that "Blatchley . . . failed to recognize that his species (*okeechobensis*) was precisely the same as LeConte's *stenochinus*."

The four known North American species of *Talanus* may be separated by the following key:

Key to species of *Talanus* occurring in the United States

1. Body elongate, slender; elytra, in dorsal view, four-tenths or less as wide as long; male with conspicuous tooth on mesal margin of distal half of each tibia, female with tibiae unmodified..... 2
- 1'. Body robust; elytra, in dorsal view, approximately half as wide as long; tibial teeth variable..... 3
2. Legs short; metafemora not extending caudad much beyond middle of third abdominal sternum; mesofemora barely extending to base of metafemora; profemora not extending cephalad beyond head; width of pronotum usually less than 85 per cent of length; total length of body seldom exceeding 5 mm.....*langurinus* (LeConte)
- 2'. Legs longer; metafemora extending caudad to or beyond suture separating third and fourth abdominal sterna; mesofemora extending beyond metacoxae; profemora extending cephalad beyond head; width of pronotum usually greater than 85 per cent of length; total length of body usually greater than 5 mm.....*spilmani* NEW SPECIES
3. Pronotum with basal and apical margins strongly beaded, continuous with lateral bead; the bead delimited by deep grooves around perimeter; metafemora extending caudad beyond fourth (last) ventral abdominal suture; male with conspicuous tooth on mesal margin of pro- and mesotibiae and two widely-spaced denticles on metatibiae; female lacking teeth on pro- and mesotibiae, metatibiae with denticles as in male
.....*mecoscelis* NEW SPECIES
- 3'. Pronotum with marginal bead not continuous around perimeter, always interrupted at middle of apical margin; basal marginal bead, if present, poorly defined and not delimited by deep grooves; metafemora never extending caudad to fourth (last) ventral abdominal suture; pro- and mesotibiae with tooth (more conspicuous in male) on mesal margin of distal half, hind tibiae simple in both sexes.....*stenochinus* (LeConte)

¹The genus *Talanus* is often credited to Mäklin (1878, p. 96). Jacquelin du Val (1857, p. 156) described *Talanus cribrarius*, his combination of a described species with a generic name fulfilling the requirements of the International Rules of Zoological Nomenclature, although he did not give a separate generic description. *Talanus cribrarius* Jacquelin du Val is the type of the genus by monotypy. (Continued bottom of page 38.)

Several collections have large series of the two previously known species. Since very little has been published on any of the members of the genus *Talanus*, I consider the following data worth recording.

Talanus langurinus (LeConte)

A total of 112 specimens was studied from the following localities: FLORIDA (Brevard, Broward, Collier, Dade, Glades, Hendry, Monroe, Palm Beach, Seminole and Volusia Counties). TEXAS: (Cameron and Hidalgo Counties). Specimens have been taken from February to October and are frequently attracted to lights.

Talanus stenochinus (LeConte)

Sixty-two specimens were studied from the following localities: FLORIDA (Alachua, Broward, Dade, Duval, Glades, Highlands, Indian River, Lee, Levy, Monroe, Palm Beach and Pinellus Counties). LOUISIANA (New Orleans, Opelousas). Specimens have been taken from January to October and are frequently attracted to lights.

Acknowledgments: The specimens upon which this study is based are from the following institutions: Carnegie Museum (CMP), Florida State Collection of Arthropods (FSCA), Museum of Comparative Zoology at Harvard University (MCZ), Ohio State University (OSU), Purdue University (PU), and United States National Museum (USNM). I wish to thank Dr. P. J. Darlington, Jr. and Dr. John F. Lawrence for help in establishing the identity of the two LeConte species of *Talanus* and for the loan of specimens; Dr. Ross H. Arnett, Jr. and Dr. Jeffrey N. L. Stibick for the opportunity to study the W. S. Blatchley specimens, Dr. George Wallace for the loan of specimens, especially those of the John Hamilton collection; Dr. Howard V. Weems, Jr. and Mr. Robert E. Woodruff for a large number of specimens providing valuable distributional data and, finally, Mr. T. J. Spilman for a tremendous amount of effort on my behalf in assuring the accuracy of many statements in this paper and for his enthusiastic support of my taxonomic investigations, both current and past.

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There is presumably a Spanish edition of Jacquelin du Val's work which is cited as both 1856 and 1857, thus making the exact date of publication rather uncertain. In any event, Jacquelin du Val's use of the name *Talanus* antedates that of Mäklin by a number of years.

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Review of South American Genus *Belopoeus* Schoenherr (Coleoptera, Curculionidae, Rhynchophorinae)

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This neotropical genus of three species has never been reviewed in its entirety. Both Schoenherr (1838) and Lacordaire (1866) knew one species only. Arrow (1903) and Bondar (1954) each described one species, but did not discuss the other species. The genus, but not the species, appeared in generic keys published by Faust (1899), Heller (1926), and Vaurie (1967). These are the only references I have found to this group of weevils. Perhaps because they are rare in collections and have been so little studied, the species of *Belopoeus* have been associated for a hundred years with the wrong group of genera. Although the type of the genus was described in *Calandra*, the genus does not belong among the Sitophilini (the "Calandrides vrais" of Lacordaire), as the species do not have the mesepimeron acuminate in front, but as in fig. 8. Rather they are related to *Metamasius* Horn, or, as mentioned by Schoenherr, to *Sphenophorus*, and similar genera.

Specimens of Bondar's species (*orbignyae*) were collected by him from the dead sheaths of the "babaçu" palm, *Orbignya speciosa*, and possibly the other species are associated with this family, as are many species of *Metamasius*. According to Bondar (1954, p. 218), "The life cycle of the species is completed within the spathes of the palm. The adults feed on the pollen and lay the eggs on the inner side of the recently opened spathes. The larvae make galleries lengthwise between the large nervures of the sheath. The life of the insect is thus passed in the crown of the palm, which is probably why the species has up to now escaped the attention of collectors." [my translation]

The species are found on the northeast coast of South America from the vicinity of Belem, Brazil, to French Guiana and Venezuela; one species (*niger*) occurs also in central Brazil at 2600 feet, and in Peru, not far from the coast, northeast of Lima. All the localities are by or near rivers.